IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Please amend claims 1-4, 10, 11, 18-24, 36, 38, 42, 44-46, 50-52, 55, 58-74, 76, 78-87 and 94-97, cancel claims 25 through 35 and 88 through 93, without prejudice or disclaimer, and add claims 98 through 141, as follows:

1. (Currently Amended) An electrically enhanced filtering apparatus, comprising:

a layer of a porous filter medium ~~exhibiting a thickness,~~ folded into arms forming one or more pockets ~~with an apex of said pocket located on~~ exhibiting a downstream side of said medium and with a base of said pocket open to an upstream side of said apparatus;

a first electrically conducting, perforated grid disposed over a first major exterior of said medium to cover said downstream side of each of said arms;

a second electrically conducting, perforated grid electrically separated from said first grid by said ~~thickness~~ medium, disposed across a second major exterior of each of said arms on an upstream side of said medium; and

~~an electrode~~ one or more electrodes separated from said upstream side of said medium, with said ~~electrode~~ one or more electrodes spaced-apart from opposite corresponding

ones of said arms while extending ~~through said pocket parallel to~~ into at least one of said pockets and spaced-apart from said second grid.

2. (Currently Amended) The apparatus of claim 1, further comprised of said base exhibiting a linear dimension greater than ~~said~~ a thickness of said medium.

3. (Currently Amended) The apparatus of claim 1, further comprised of a distance between said base and ~~said~~ an apex formed between neighboring said arms being greater than or equal to a linear dimension exhibited by said base.

4. (Currently Amended) The apparatus of claim 1, further comprised of a distance between said base and said apex being not less than a linear dimension exhibited by said base, and said linear dimension being greater than ~~said~~ a thickness of said medium.

5. (Original) The apparatus of claim 1, further comprised of:

an air inlet; and

an electrically conducting screen spaced-apart from said electrode and separated by said electrode from said second grid, extending across said air inlet.

6. (Original) The apparatus of claim 1, with said layer further comprised of:

said layer disposed in a plurality of pleats within each of said arms, with said pleats

undulating between said first grid and said second grid.

7. (Original) The apparatus of claim 1, further comprised of:

said layer extending along each of said arms in an elongate linear continuum lying between said first grid and said second grid.

8. (Original) The apparatus of claim 6, further comprised of said layer extending along each of said arms in a linear continuum lying between said first grid and said second grid.

9. (Original) The apparatus of claim 1, further comprised of:

said layer extending along each of said arms in a linear continuum lying between said first grid and said second grid; and

an electrical insulator maintaining said second grid physically spaced-apart from said medium.

10. (Currently Amended) The apparatus of claim 1, further comprised of:

said arms being joined at ~~said~~ an apex to form a V-shape.

11. (Currently Amended) The apparatus of claim 1, further comprised of:

said arms being substantially parallel and being ~~joined~~ connected at ~~said apex~~ opposite ends to different neighboring arms.

12. (Original) The apparatus of claim 1, further comprised of:

said second grid being borne by said upstream surface and lying upon said arms.

13. (Original) The apparatus of claim 6, further comprised of:

said second grid being borne by said upstream surface and lying upon said pleats.

14. (Original) The apparatus of claim 1, further comprised of:

an electrical insulator maintaining said second grid spaced apart from said upstream surface.

15. (Original) The apparatus of claim 1, further comprised of:

said second grid comprising a material porous to passage of gaseous fluid through said apparatus but partially impervious to particles borne by the gaseous fluid.

16. (Original) The apparatus of claim 1, further comprised of:

said second grid comprising a material porous to passage of gaseous fluid passing through said apparatus but partially impervious to particles borne by the gaseous fluid; and

said second grid being relatively more electrically conductive than said medium.

17. (Original) The apparatus of claim 1, further comprised of;

said second grid comprising a material porous to passage of gaseous fluid passing through said apparatus but partially impervious to particles borne by the gaseous fluid; and

said second grid being made of a material selected from a group comprising carbon, carbon fibers, fibers coated with carbon, and combinations thereof.

18. (Currently Amended) The apparatus of claim 1, further comprising at least one of said first grid and said second grid being made of a material selected from a group comprised of carbon, carbon fibers ~~and~~, fibers coated with carbon, and combinations thereof.

19. (Currently Amended) The apparatus of claim 1, further comprising:

a first electrical conductor coupling said first grid to a local reference potential;

a second electrical conductor disposed to couple said electrode to a second and substantially different potential[[;]], and thereby enabling ~~an electrical insulator maintaining~~ said second grid ~~at~~ to exhibit a first potential difference relative to said electrode, and ~~at~~ a second potential difference relative to said first grid.

20. (Currently Amended) The apparatus of claim 1, further comprising:

a first electrical conductor coupling said first grid ~~and~~ to a local reference potential;

a second electrical conductor disposed to couple said electrode to a second and substantially different potential.

21. (Currently Amended) The apparatus of claim 1, further comprising:

an inlet accommodating ~~egress~~ entry of gaseous fluid into said apparatus; and

an electrically conducting screen spaced-apart upstream from said electrode and spaced-apart from said second grid, extending across said inlet and ~~establishing~~ accommodating a potential difference between said electrically conducting screen and said electrode that creates significant ionization of the gaseous fluid.

22. (Currently Amended) The apparatus of claim 1, further comprising:

a first electrical conductor coupling said first grid to a local reference potential;

a second electrical conductor disposed to couple said electrode to a second and substantially different potential; and

~~an electrical insulator maintaining~~ said apparatus exhibiting a first potential difference between said electrode and said first grid.

23. (Currently Amended) The apparatus of claim 1, further comprising:

a first electrical conductor coupling said first grid ~~and~~ to a local reference potential;

a second electrical conductor disposed to couple said electrode to a second and substantially different potential, thereby enabling said second grid to exhibit a first potential difference relative to said electrode and a second potential difference relative to said first grid;

~~an electrical insulator maintaining~~ said apparatus exhibiting a ~~first~~ third potential difference between said electrode and said first grid; and

an electrically conducting screen spaced-apart from said electrode and separated by said electrode from said second grid, extending across said inlet and establishing a third potential difference between said electrically conducting screen and said electrode.

24. (Currently Amended) The apparatus of claim 1, further comprising:

a first electrical conductor coupling said first grid and to a local reference potential;

a second electrical conductor disposed to couple said electrode to a second and substantially different potential;

~~an electrical insulator maintaining~~ said apparatus exhibiting a first potential difference between said electrode and said first grid;

an inlet accommodating egress of gaseous fluid into said apparatus; and

an electrically conducting screen spaced-apart from said electrode and spaced-apart from said second grid, extending across said inlet and establishing a third potential difference between said electrically conducting screen and said electrode that creates significant ionization of the gaseous fluid.

25. (Cancelled).

26. (Cancelled).

27. (Cancelled).

28. (Cancelled).

29. (Cancelled).

30. (Cancelled).

31. (Cancelled).

32. (Cancelled).

33. (Cancelled).

34. (Cancelled).

35. (Cancelled).

36. (Currently Amended) An electrically enhanced filtering process, comprising:

positioning across a flow of transient gaseous phase fluid, a porous filter medium ~~exhibiting a thickness~~ and folded into one or more arms forming at least one pocket with each pocket closed at an apex on a downstream side of said arms and with a base of each pocket opening upstream sides of said arms to incidence of said flow;

maintaining a first electrically conductive grid disposed along said downstream sides of said arms able to accommodate passage of the ~~transient air~~ fluid from said medium;

maintaining a second electrically conductive grid covering said upstream sides of said arms in a position spaced-apart from said first grid to accommodate said passage of the ~~transient gaseous~~ fluid, at a potential difference relative to said first grid; and

locating ~~a first electrode~~ one or more electrodes within said pocket at a location within the flow of the ~~transient gaseous~~ fluid, spaced-apart from ~~and parallel to~~ said second grid, and disposed to transfer a charge onto said second grid.

37. (Original) The process of claim 36, further comprised of:

coupling said first grid to a reference potential; and

establishing said potential difference between said second grid and said first grid by applying to said electrode a potential difference relative to said reference potential.

38. (Currently Amended) The process of claim 36, further comprised of:

enabling occurrence of ionization of the fluid by a potential difference between said electrodes and maintaining a potential difference between said electrodes and a control electrode spaced-apart and upstream from said first electrode and spaced-apart and upstream from said second grid, within the flow of the ~~transient air~~ fluid.

39. (Original) The process of claim 36, further comprised of arranging said medium along each of said arms with a plurality of folds undulating alternately toward said first grid and said second grid.

40. (Original) The process of claim 36, further comprised of arranging said medium along each of said arms in a linear continuum positioned between said first grid and said second grid.

41. (Original) The process of claim 36, further comprised of:

extending said medium as a layer along each of said arms in an elongate linear

continuum positioned between said first grid and said second grid; and

electrically isolating said second grid from direct electrical continuity with said medium.

42. (Currently Amended) A filter for an electrically enhanced filtering apparatus, comprising:

a layer of a porous filter medium ~~exhibiting a thickness~~[[,]] folded into one or more arms forming a pocket with ~~an apex~~ a terminus of said pocket located on a downstream side of said medium and with a base of said pocket open to an upstream side of said apparatus;

a first electrically conducting, perforated grid disposed on an exterior of said ~~media~~ medium to cover said downstream side of each of said arms; and

a second electrically conducting, perforated grid electrically separated from said first grid by at least said ~~thickness~~ medium, disposed across the exterior of each of said arms on an upstream side of said medium.

43. (Original) The apparatus of claim 42, further comprised of said base exhibiting a linear dimension greater than said thickness.

44. (Currently Amended) The apparatus of claim 42, further comprised of a distance between said base and said ~~apex~~ terminus being greater than or equal to a linear dimension exhibited by said base.

45. (Currently Amended) The apparatus of claim 42, further comprised of a distance between said base and said ~~apex~~ terminus being not less than a linear dimension exhibited by said base, and said linear dimension being greater than ~~said~~ a thickness exhibited by said medium.

46. (Currently Amended) The apparatus of claim 42, further comprised of:

an air inlet; and

an ~~electrically conducting screen spaced-apart from said~~ electrode ~~and~~ spaced-apart from said second grid, ~~extending~~ positioned between said arms to extend across said air inlet.

47. (Original) The apparatus of claim 42, with said layer further comprised of:

said layer disposed in a plurality of pleats within each of said arms, with said pleats undulating between said first grid and said second grid.

48. (Original) The apparatus of claim 42, further comprised of:

said layer extending along each of said arms in a linear continuum lying between said first grid and said second grid.

49. (Original) The apparatus of claim 42, further comprised of said layer extending along each of said arms in an elongate linear continuum lying between said first grid and said second grid.

50. (Currently Amended) The apparatus of claim 42, further comprised of:

said layer extending along each of said arms in a linear continuum lying between said first grid and said second grid; and

an electrical insulator maintaining one of said first grid or said second grid physically spaced-apart from said medium.

51. (Currently Amended) The apparatus of claim 42, further comprised of said arms being joined at said ~~apex~~ terminus to form a V-shape.

52. (Currently Amended) The apparatus of claim 42, further comprised of said arms being substantially parallel and being joined ~~at said apex~~ at alternate ends to different ones of said folds.

53. (Original) The apparatus of claim 42, further comprised of said second grid being borne by said upstream surface and lying upon said arms.

54. (Original) The apparatus of claim 47, further comprised of said second grid being borne by said upstream surface and lying upon said pleats.

55. (Currently Amended) The apparatus of claim 42, further comprised of an electrical

insulator maintaining said second grid spaced apart from said upstream ~~surface~~ side.

56. (Original) The apparatus of claim 42, further comprised of said second grid comprising a material porous to passage of gaseous fluid through said apparatus but partially impervious to particles borne by the gaseous fluid.

57. (Original) The apparatus of claim 42, further comprised of:

said second grid comprising a material porous to passage of gaseous fluid passing through said apparatus but partially impervious to particles borne by the gaseous fluid; and

said second grid being relatively more electrically conductive than said medium.

58. (Currently Amended) The apparatus of claim 42, further comprised of;

said second grid comprising a material porous to passage of gaseous fluid passing through said apparatus but partially impervious to particles borne by the gaseous fluid; and

said second grid being made of ~~a~~ an electrically conductive material selected from a group comprising carbon, carbon fibers, fibers coated with carbon, and combinations thereof.

59. (Currently Amended) The apparatus of claim 42, further comprising at least one of said first grid and said second grid being made of a material selected from a group comprised of carbon, carbon fibers, ~~and~~ fibers coated with carbon, and combinations thereof.

60. (Currently Amended) A filter for an electrically enhanced filtering apparatus, comprising:

a layer of a porous filter medium ~~exhibiting a thickness~~ disposed in a plurality of pleats within each of one or more of a plurality of arms, with said pleats undulating in succession, folded into said one or more arms forming a pocket with ~~an apex~~ a terminus of said pocket located on a downstream side of said medium and with a base of said pocket open to an upstream side of said apparatus;

a first electrically conducting, perforated grid disposed to cover pleats along said downstream side of each of said arms; and

a second electrically conducting, perforated grid electrically separated from said first grid by said ~~thickness~~ medium, disposed across pleats along a second exterior of each of said arms on an upstream side of said medium~~; and~~

~~an electrode separated from said upstream side of said medium, with said electrode spaced-apart by a fixed distance from opposite corresponding ones of said arms while extending through said pocket parallel to and spaced-apart from said second grid~~.

61. (Currently Amended) The apparatus of claim 60, further comprised of said base exhibiting a linear dimension greater than ~~said~~ a thickness created by said pleats.

62. (Currently Amended) The apparatus of claim 60, further comprised of a distance between said base and said ~~apex~~ terminus being greater than or equal to a linear dimension

exhibited by said base.

63. (Currently Amended) The apparatus of claim 60, further comprised of a distance between said base and said ~~apex~~ terminus being not less than a linear dimension exhibited by said base, and said linear dimension being greater than ~~said~~ a thickness of said medium created by said pleats.

64. (Currently Amended) An electrically enhanced filtering apparatus, comprising:

a layer of a porous filter medium ~~exhibiting a thickness~~, folded into one or more arms forming a pocket with ~~an apex~~ a terminus of said pocket located on a downstream side of said medium and with a base of said pocket open to an upstream side of said apparatus;

a first electrically conducting, perforated grid disposed on an exterior of said medium to cover said downstream side of each of said arms;

a second electrically conducting, perforated grid electrically separated from said first grid by said ~~thickness~~ medium, disposed across the exterior of each of said arms on an upstream side of said medium;

~~a first~~ an electrode separated from said upstream side of said medium, with said electrode spaced-apart by a fixed distance from opposite corresponding ones of said arms while extending through said pocket parallel to and spaced-apart from said second grid; and

~~a second electrode~~ an electrical conductor spaced apart upstream from said electrode and said second electrically conducting grid, disposed to be maintained at a ~~reference~~ potential

difference relative to said ~~first electrode~~ electrode.

65. (Currently Amended) The apparatus of claim 64, further comprised of said base exhibiting a linear dimension greater than ~~said~~ a thickness of said medium.

66. (Currently Amended) The apparatus of claim 64, further comprised of a distance between said base and said ~~apex~~ terminus being greater than or equal to a linear dimension exhibited by said base.

67. (Currently Amended) The apparatus of claim 64, further comprised of a distance between said base and said ~~apex~~ terminus being not less than a linear dimension exhibited by said base, and said linear dimension being greater than said thickness.

68. (Currently Amended) An electrically enhanced filtering apparatus, comprising:

a layer of a porous filter medium ~~exhibiting a thickness~~ disposed in a plurality of pleats within each of one or more of a plurality of arms, with said pleats undulating in succession and folded into one or more arms forming a pocket with ~~an apex~~ a terminus of said pocket located on a downstream side of said medium and with a base of said pocket open to an upstream side of said apparatus;

a first electrically conducting, perforated grid disposed on an exterior of said medium to cover said downstream side of each of said arms;

a second electrically conducting, perforated grid electrically separated from said first grid by said ~~thickness~~ medium, disposed across the exterior of each of said arms on an upstream side of said medium;

~~a first~~ at least one electrode separated from said upstream side of said medium, with said electrode spaced-apart by a fixed distance from opposite corresponding ones of said arms while extending through said pocket parallel to and spaced-apart from said second grid; and

~~a second electrode~~ an electrically conducting screen spaced apart upstream from said electrode and said second electrically conducting grid, disposed to be maintained at a reference potential difference relative to said first electrode.

69. (Currently Amended) The apparatus of claim 68, further comprised of said base exhibiting a linear dimension greater than ~~said~~ a thickness created by said pleats.

70. (Currently Amended) The apparatus of claim 68, further comprised of a distance between said base and said ~~apex~~ terminus being greater than or equal to a linear dimension exhibited by said base.

71. (Currently Amended) The apparatus of claim 68, further comprised of a distance between said base and said ~~apex~~ terminus being not less than a linear dimension exhibited by said base, and said linear dimension being greater than ~~said~~ a thickness of said medium.

72. (Currently Amended) An electrically enhanced filtering process, comprising:

positioning across a flow of transient gaseous phase fluid, a porous filter medium ~~exhibiting a thickness and~~ folded into one or more arms forming at least one pocket with a closed ~~apex~~ terminus on a downstream side of said medium and with a base of each said pocket opening upstream sides of said arms to incidence of said flow;

maintaining a first electrically conductive grid disposed along said downstream side of said medium able to accommodate passage of the ~~transient air~~ fluid through said medium;

maintaining a second electrically conductive grid covering said upstream sides of said arms in a position spaced-apart from said first grid to accommodate said passage of the ~~transient gaseous~~ fluid, ~~at a potential difference relative to said first grid~~ electrically separated from said first grid by said medium;

maintaining a first potential difference between said second grid and said first grid by locating ~~a first~~ at least one electrode within said pocket at a location within the flow of the ~~transient gaseous~~ fluid, spaced-apart from and parallel to said second grid, and disposed to transfer a charge onto said second grid; and

maintaining ~~a second electrode~~ an electrically conducting screen spaced-apart upstream from said first electrode and said second electrically conductive grid, at a ~~reference~~ second potential difference relative to said first electrode.

73. (Currently Amended) The process of claim 72, further comprised of:

coupling said first grid to a reference potential; and

establishing said first potential difference between said second grid and said first grid by applying to said electrode a potential difference relative to said reference potential.

74. (Currently Amended) The process of claim 72, further comprised of:

maintaining a control electrode spaced-apart and upstream from said first electrode, within the flow of the ~~transient air~~ fluid, at a third potential difference relative to said electrode, while a second and lesser potential difference occurs between said electrode and said second grid, and said first potential difference occurs between said second grid and said first grid.

75. (Original) The process of claim 72, further comprised of pleating said filter medium in a plurality of said arms into a plurality of pleats undulating between said first grid and said second grid.

76. (Currently Amended) The process of claim 72, further comprised of arranging said filter medium as a ~~flat and elongate~~ layer extending along a plurality of said arms between said first grid and said second grid.

77. (Original) The process of claim 72, further comprised of inserting electrical insulators between said filter medium and said second grid.

78. (Currently Amended) An electrically enhanced filtering process, comprising:

arranging a layer of a filter medium ~~exhibiting a thickness~~, into at least two folds to define ~~an apex~~ a terminus between each pair of said folds on a downstream side of said layer when said layer is positioned across a flow of a gaseous phase fluid, and an open base on an upstream side of said layer opposite from each corresponding apex;

disposing a first perforated, electrically conducting grid along exposed major surfaces of said downstream side of said layer; and

positioning a second perforated, electrically conducting grid along exposed major surfaces of said upstream side of said layer, spaced-apart and in electrical separation from said first grid by at least said ~~thickness~~ medium.

79. (Currently Amended) The process of claim 78, further comprised of arranging said layer with a distance between each corresponding base and ~~apex~~ terminus formed between each pair of said transversely oblique folds being not less than a linear dimension exhibited by said base, with said linear dimension being greater than ~~said~~ a thickness of said medium.

80. (Currently Amended) The process of claim 78, further comprised of removably attaching said filter medium onto one of said first grid and said second grid.

81. (Currently Amended) The process of claim 78, further comprised of inserting an assembly formed by said first grid and said filter medium into a frame ~~with an electrically insulating seal separating said assembly from said frame and restricting passage of the gaseous~~

~~fluid between said assembly and said frame~~ bearing said second grid in electrical isolation from said frame.

82. (Currently Amended) The process of claim 78, further comprised of:

forming an assembly of said first grid and said filter medium;

potting ends of said assembly intermediate[[,]] said upstream side and said downstream side ~~with an electrically insulating material; and inserting said assembly into a frame with said insulating material forming~~ to form a seal to passage of the ~~gaseous~~ fluid between said ends and ~~said~~ a frame encasing said assembly.

83. (Currently Amended) An electrically enhanced filtering process, comprising:

arranging into at least two transversely oblique folds, a layer of a filter medium exhibiting first major exterior surfaces on an upstream side of said layer separated by a thickness of said layer from second major exterior surfaces on a downstream side of said layer to accommodate passage of gaseous phase fluids through said medium while trapping particles borne by the ~~gaseous~~ fluids;

aligning a first electrically conducting grid with said folds along said first major exterior surfaces; and

aligning a second electrically conducting grid maintained in electrical separation by said filter medium from said first grid, with said folds along said second major exterior surfaces.

84. (Currently Amended) The process of claim 83, further comprised of arranging said

layer with a distance between each corresponding base and ~~apex~~ terminus formed between each pair of said transversely oblique folds being not less than a linear dimension exhibited by said base, with said linear dimension being greater than ~~said~~ a thickness of said medium.

85. (Currently Amended) The process of claim 83, further comprised of removably attaching said filter medium onto one of said first grid and said second grid.

86. (Currently Amended) The process of claim 83, further comprised of inserting an assembly formed by said first grid and said filter medium into a frame with an electrically insulating seal separating said assembly from said frame and restricting passage of the ~~gaseous~~ fluid between said assembly and said frame.

87. (Currently Amended) The process of claim 83, further comprised of:

forming an assembly of said first grid and said filter medium;

potting ends of said assembly intermediate[[,]] said upstream side and said downstream side with ~~an electrically insulating material~~ a sealant; and

inserting said assembly into a frame with said ~~insulating material~~ sealant forming a seal to passage of the ~~gaseous~~ fluid between said ends and said frame.

88. (Cancelled).

89. (Cancelled).

90. (Cancelled).

91. (Cancelled).

92. (Cancelled).

93. (Cancelled).

94. (Currently Amended) An ionizer for charging particles in an electrically enhanced filter, comprising:

a perforated screen of an electrically conducting material approximately defining a ~~planar~~ surface disposed across an opening to maintain a local reference potential;

an array of a plurality of spaced-apart electrically conducting ~~wires suspended in an array~~ electrodes extending across said opening ~~surface~~ with neighboring ones of said electrodes being separated and forming a plurality of gaps accommodating protrusion of alternate folds of a filter medium between said neighboring ones of said electrodes, while said electrodes lie between open bases and closed terminus of pockets formed by the folds while spaced physically apart from corresponding major surfaces of the filter medium; and

an electrical insulator maintaining at least one of said ~~wires~~ electrodes spaced-apart from said surface.

95. (Currently Amended) The electrically enhanced filter of claim 94, further comprised of a plurality of ~~spring~~ springs having a first end supported by said insulator and a second end maintaining said at least one of said ~~wires~~ electrodes under tension.

96. (Currently Amended) The electrically enhanced filter of claim 94, further comprised of a ~~spring~~ bus interposed to connect said electrical connector and said at least one of said ~~wires~~ electrodes.

97. (Currently Amended) The electrically enhanced filter of claim 94, further comprised of said array comprised of a plurality of said ~~wires~~ electrodes extending across said surface with a first transverse separation between said ~~wires~~ electrodes within each pair of said ~~wires~~ electrodes, and with a second and greater separation between each said pair.

98. (New) The apparatus of claim 94, further comprised of:

an electrically conducting screen spaced-apart from said electrode and from said second grid, with said electrode disposed between said screen and said second grid.

99. (New) The apparatus of claim 1, further comprising:

a first electrical conductor coupling said first grid to a local reference potential;

a second electrical conductor disposed to couple said electrode to a second potential exhibiting a substantially different magnitude; and

an electrically conducting screen spaced-apart from said electrode and spaced-apart from said second grid, accommodating entry of a gaseous phase fluid into said apparatus, disposed to create significant ionization of the fluid by establishing a potential difference between said screen

and said electrode.

100. (New) The apparatus of claim 1, further comprising:

a first electrical conductor coupling said first grid to a local reference potential;

a second electrical conductor disposed to couple said electrode to a second and substantially different potential; and

an electrically conducting screen spaced-apart from said electrode and from said second grid, extending across said inlet and establishing a first potential difference between said electrically conducting screen and said electrode, with said apparatus exhibiting a second and lesser potential difference between said electrode and said second grid, and a third potential difference between said second grid and said first grid.

101. (New) The apparatus of claim 1, further comprising:

a first electrical conductor coupling said first grid and to a local reference potential;

a second electrical conductor disposed to couple said electrode to a second and substantially different potential, and

an electrically conducting screen spaced-apart from said electrode and from said second grid, extending across said inlet and establishing a first potential difference between said electrically conducting screen and said electrode, with said apparatus exhibiting a second potential difference between said electrode and said second grid, and a third potential difference between said second grid and said first grid.

102. (New) The apparatus of claim 42, further comprised of:

said layer extending along each of said arms in a linear continuum lying between said first grid and said second grid; and

an electrical insulator maintaining said first grid physically spaced-apart from said medium.

103. (New) The process of claim 72, further comprised of creating an electrical insulator between said filter medium and said second grid.

104. (New) An electrically enhanced filtering apparatus, comprising:

a layer of a porous filter medium folded into arms forming one or more pockets with a terminus of said pocket located on a downstream side of said medium and with a base of said pocket open to an upstream side of said apparatus;

a first electrically conducting, perforated grid disposed over a first major exterior of said medium to cover said downstream side of each of said arms;

a second electrically conducting, perforated grid electrically separated from said first grid by said medium, disposed across a second major exterior of each of said arms on an upstream side of said medium;

an electrode separated from said upstream side of said medium, with said electrode spaced-apart from opposite corresponding ones of said arms while extending through said pocket

parallel to and spaced-apart from said second grid; and

an electrically conducting screen extending across an inlet to said apparatus, establishing a first potential difference relative to said electrode, while a second potential difference occurs between said electrode and said second grid, and a third potential difference occurs between said second grid and said first grid.

105. (New) The apparatus of claim 104, comprised of said screen and said first grid being coupled to a local reference potential.

106. (New) An electrically enhanced filter, comprising:

a layer of a porous medium having a major first surface and a major second surface, folded into one or more pairs of arms each joined together at a terminus and defining a pocket included between pairs of said arms;

a first electrically conducting grid extending across said arms of said first major surface;

a second electrically conducting grid extending across said arms of said second major surface; and

at least one of said first grid and said second grid comprising a print of an electrically conducting material deposited upon a correspond one of said major first surface and said major second surface.

107. (New) An electrically enhanced filtering apparatus, comprising:

a layer of a porous filter medium, folded into arms forming one or more pockets with a terminus of said pocket located on a downstream side of said medium and with a base of said pocket open to an upstream side of said apparatus;

a first electrically conducting, perforated grid coupled to a local reference potential and disposed over a first major exterior of said medium to cover said downstream side of each of said arms;

a second electrically conducting, perforated grid electrically separated from said first grid by said medium, disposed across a second major exterior of each of said arms on an upstream side of said medium;

an electrical resistance coupling said second grid to said local reference potential; and

an electrode separated from said upstream side of said medium, with said electrode spaced-apart from opposite corresponding ones of said arms while extending through said pocket parallel to and spaced-apart from said second grid.

108. (New) The apparatus of claim 107, comprising an electrically conducting screen extending across an inlet to said apparatus, establishing a first potential difference relative to said electrode, while a second potential difference occurs between said electrode and said second grid, and a third potential difference occurs between said second grid and said first grid.

109. (New) The apparatus of claim 1, comprised of said electrode forming a plurality of lengths positioned within different corresponding ones of said pockets, spaced-apart from said second grids.

110. (New) The apparatus of claim 107, comprised of said electrode forming an array comprising a plurality of spaced-apart lengths, with at least one of each of said lengths positioned within each of said pockets.

111. (New) The process of claim 36, comprised of arranging said first electrode in an array of a plurality of spaced-apart lengths, with at least one of each of said lengths positioned within each of said pockets.

112. (New) The apparatus of claim 42, further comprised of:

said layer extending along each of said arms in a linear continuum lying between said first grid and said second grid; and

an electrical insulator maintaining said first grid physically spaced-apart from said medium.

113. (New) The apparatus of claim 42, further comprised of an electrical insulator maintaining said first grid spaced apart from said upstream surface.

114. (New) An electrically enhanced filtering apparatus, comprising:

a layer of a porous filter medium folded into arms forming one or more pockets with a terminus of said pocket located on a downstream side of said medium and with a base of said pocket open to an upstream side of said apparatus, with said layer disposed in a plurality of undulating pleats within each of said arms;

a first electrically conducting grid disposed at a local reference potential across a first major exterior of said medium to cover said downstream side of each of said arms;

an electrode separated from an upstream side of said medium, with said electrode spaced-apart from opposite corresponding ones of said arms while extending through said pocket;

a second electrically conducting grid electrically separated from said first grid by said medium, disposed across a second major exterior of each of said arms on an upstream side of said medium; and

an electrically conducting screen disposed upstream of said electrode at said local reference potential and positioned to extend across an inlet to said apparatus and establish a first potential difference relative to said electrode, while a second potential difference occurs between said electrode and said second grid, and a third potential difference occurs between said second grid and said first grid.

115. (New) The apparatus of claim 114, comprised of said electrode forming an array comprising a plurality of spaced-apart lengths, with at least one of each said lengths positioned within each of said pockets.

116. (New) A filter for an electrically enhanced filtering apparatus, comprising:

a layer of a porous filter medium folded into one or more arms to fit transversely across a passageway extending between upstream and downstream ports of the apparatus, with successive pairs of said arms alternately joined together to form a terminus and spaced-apart to form a pocket providing a base open to passage of effluent between the upstream and downstream ports;

a first grid of an electrically conducting material printed upon a first major exterior surface of said medium, across each of said arms of said first major exterior surface; and

a second, electrically conducting grid electrically separated from said first grid by said medium, disposed across each of said arms of a second major exterior surface of said medium.

117. (New) The apparatus of claim 116, further comprising at least one of said first grid and said second grid being made of a material selected from a group comprised of carbon, carbon fibers, fibers coated with carbon, and combinations thereof.

118. (New) The filter of claim 116, comprised of said second grid being printed upon said second major surface of said medium, with an electrically conductive material selected from a group comprising carbon, carbon fibers, fibers coated with carbon, and combinations thereof.

119. (New) The filter of claim 116, comprised of:

a frame encasing said medium, said first grid and said second grid;

said frame establishing an electrical resistance between said second grid and a local reference potential.

120. (New) The filter of claim 116, comprised of:

a frame encasing said medium and said first grid; and

a potting substance forming a seal hindering passage of the effluent between a perimeter of said medium and said frame.

121. (New) The filter of claim 116, comprised of:

a frame encasing said medium and said first grid;

a potting substance forming a seal between a perimeter of said medium and said frame; and

said frame removably receiving said second grid to lie within said folds, across apices and along said arms of said second major exterior surface of said medium.

122. (New) The filter of claim 116, comprised of:

a frame encasing said second grid in electrical isolation from said frame;

a mat forming a seal hindering passage of the effluent between a perimeter of said filter medium and interior surfaces of said frame.

123. (New) The filter of claim 116, comprised of:

a frame encasing said second grid;

a mat forming a seal between a perimeter of said filter medium and interior surfaces of said frame; and

said frame removably receiving said medium and said first grid, with said second grid lying within said continued folds, across apices and along said arms of said second major exterior surface of said medium.

124. (New) The process of claim 36, comprised of:

extending said medium as a layer along each of said arms in an elongate linear continuum positioned between said first grid and said second grid;

electrically isolating said second grid from direct electrical continuity with said medium;

extending an electrically conducting screen across an inlet to said apparatus;

establishing a first potential difference between said screen and said electrode with a second potential difference occurring between said electrode and said second grid, and a third potential difference occurring between said second grid and said first grid.

125. (New) A filter for an electrically enhanced filtering apparatus, comprising:

a frame providing an inlet and an outlet;

a first electrically conducting porous grid attached to said frame to extend across said inlet, with said first grid folded into one or more arms forming a pocket with a terminus of

said pocket positioned within said outlet and with a base of said pocket positioned to open toward said inlet; and

a replaceable media assembly removably insertably within said inlet, comprised of:

a layer of a porous filter material folded into a geometric construct providing a downstream surface conforming in contour to said porous grid, receivable within said pocket to cover said arms of said first grid; and

a second electrically conducting porous grid positioned in mating disposition with an upstream surface of said filter material in conformance with said contour.

126. (New) The filter of claim 125, comprised of:

said frame electrically coupling said first grid to a local reference potential; and

said layer of filter material bearing said second grid in electrical separation from said frame.

127. (New) The filter of claim 125, comprised of:

said frame electrically coupling said first grid to a local reference potential; and

said frame establishing an electrical resistance between said second grid and said local reference potential.

128. (New) The filter of claim 125, comprised of said second grid being printed with an

electrically conducting material upon said upstream surface of said medium, said electrically conducting material being selected from the group comprising carbon, carbon fibers, fibers coated with carbon, and combinations thereof.

129. (New) The filter of claim 125, comprised of an electrical insulator interposed between said upstream surface and said first grid to maintain said first grid spaced apart from said upstream surface.

130. (New) The filter of claim 125, comprised of:

said layer of filter material being repetitively lapped into a plurality of pleats along each of said arms, with crests of said pleats forming said upstream surface and said downstream surface; and

said second grid providing said mating disposition by extending across said crests along said upstream surface.

131. (New) A filter for an electrically enhanced filtering apparatus, comprising:

a frame providing an inlet and an outlet;

a first electrically conducting porous grid attached to said frame to extend across said inlet, with said first grid folded into one or more arms forming a pocket with a terminus of said pocket positioned within said outlet and with a base of said pocket positioned to open toward said inlet;

a replaceable layer of a porous filter material folded into a geometric construct providing an upstream surface exposed through said inlet and a downstream surface conforming in contour to said porous grid, removably receivable within said pocket to cover said arms; and

a second electrically conducting porous grid removably insertable through said inlet and folded to conform to said contour of said upstream surface of said layer of filter material and cover said upstream surface of said filter material.

132. (New) The filter of claim 131, comprised of:

said frame electrically coupling said first grid to a local reference potential; and

said frame being electrically separated from said second grid.

133. (New) The filter of claim 131, comprised of:

said frame electrically coupling said first grid to a local reference potential; and

said frame establishing an electrical resistance between said second grid and said local reference potential.

134. (New) The filter of claim 131, comprised of an electrical insulator interposed between said upstream surface and said first grid to maintain said first grid spaced apart from said upstream surface.

135. (New) The filter of claim 131, comprised of:

said layer of filter material being repetitively lapped into a plurality of pleats along each of said arms, with crests of said pleats forming said upstream surface and said downstream surface; and

said second grid covering said upstream surface by extending across said crests along said upstream surface.

136. (New) A filter for an electrically enhanced filtering apparatus, comprising:

a replaceable media assembly, comprised of:

a layer of a porous filter material folded into one or more arms forming at least one pocket with a terminus positionable toward a downstream side of the apparatus and a base of said pocket open toward an upstream side of the apparatus;

a first electrically conducting porous grid disposed across said arms of said layer on a downstream surface of filter material;

a frame accommodating removable insertion of said media assembly, with said first grid extending across a outlet of said frame; and

a second electrically conducting grid formed into a geometric construct conforming in contour to an upstream surface of said filter medium to cover said arms within said pocket, attached to said frame to extend across an inlet of said frame.

137. (New) The filter of claim 136, comprised of:

said frame electrically coupling said first grid to a local reference potential; and

said layer of filter material bearing said second grid in electrical separation from said frame.

138. (New) The filter of claim 136, comprised of:

said frame electrically coupling said first grid to a local reference potential; and

said frame establishing an electrical resistance between said second grid and said local reference potential.

139. (New) The filter of claim 136, comprised of said first grid being printed with an electrically conducting material upon said downstream surface of said medium, said electrically conducting material being selected from the group comprising carbon, carbon fibers, fibers coated with carbon, and combinations thereof.

140. (New) The filter of claim 136, comprised of an electrical insulator interposed between said upstream side and said second grid to maintain said second grid spaced apart from said upstream surface.

141. (New) The filter of claim 136, comprised of:

said layer of filter material being repetitively lapped into a plurality of pleats along each of said arms, with crests of said pleats forming said upstream surface and said downstream surface;

and

said first grid being disposed across said arms of said layer by extending across said crests.